

AUTOMATED LICENSE PLATE RECOGNITION (ALPR)

A. OVERVIEW

An efficient parking system is vital to the City's downtown economic development, business district support and livability of residential neighborhoods that require parking enforcement. Parking management helps to ensure that priority land uses are supported with an effective and efficient system of access for the priority users.

Over the course of several years the City's goal is to build a Parking System that is fully integrated. A key component in this effort is the continued adoption of technology. As the City embarks on this process it is paramount that the decisions that are made with regards to technology are thought of in terms of a bigger picture. With multiple vendors and constant changing technology the focus will be on selecting vendors who have the experience, skills and vision to allow the City to fulfill our desire to be a first class parking system.

One component of the new system will be the deployment of Automated License Plate Recognition (ALPR). By increasing our efficiencies we will be able to provide better service levels to many of the existing business districts that we don't currently service at desired levels.

Another key benefit of LPR will allow us to roll out our new Residential Permit Program. The revamped Residential Permit Program will provide a stronger service level to residential areas. The enhanced enforcement for this program hinges on ALPR technology. Simply put, the new residential program cannot provide the expected level of service under conventional enforcement practices. Use of ALPR will allow the program to be managed at a much lower cost with a higher level of service.

B. HOW IT WORKS

The LPR system is comprised of cameras mounted to a vehicle that capture license plate images. Those images are digitized and compared against any number of databases. For parking services purposes the license plates would be compared to a database(s) that would allow us to more efficiently enforce our time regulated areas as well as established residential parking zones (RPZ's).

The typical equipment set up per vehicle includes three vehicle mounted cameras mounted at various angles to catch license plates in many different parking orientations. The cameras work during the day or night and have the ability to capture images at speeds consistent with safe driving patterns.

Inside the car is a computer that constantly references pre-determined databases with "white list" data. A "white list" is a list of license plates that are credentialed to park in a certain area. Currently Parking Enforcement only uses internal databases related to the timing of vehicles for time regulation enforcement and the database related to the Residential Parking Program although there is an opportunity to link other multi-agency databases including those used to identify stolen vehicles, scofflaws and Amber alerts.

The system will show a display of "hits" and make an audible noise indicating a potential violation. The computer screen will give the vehicles exact location. The system does not identify registered owner

information. A license plate image is the only identifier collected by the system, no personally identifiable information is collected at this point.

The Parking Enforcement Officer (PEO) will receive “hits” on plates as they patrol. The information received is temporarily stored until a parking violation is issued. The ALPR system can store the information for any pre-determined amount of time. Current protocols call for the system to retain only data for those instances that resulted in a parking citation or warning being issued. All other license plate data is automatically deleted from the system each night prior to the beginning of the next business day.

C. DATA MANAGEMENT

RETENTION OF DATA

The ALPR system is merely a tool to speed up enforcement, not a tool to record historical vehicle location data or identify the owner of a vehicle in public. The data related to vehicles is useful at the time of enforcement and has limited historical value to Parking Services. Since the ALPR system is only comparing license plates against the registered parking databases it will not store data related to generic “hits” unless the “hit” manifests itself into a parking enforcement action (citation or warning). Such actions are uploaded to the Municipal Courts and are subject to the Court’s record retention requirements. For those “hits” that don’t result in a citation or warning to be issued the system will automatically delete from the system each night.

The system does collect valuable data including number of vehicles scanned and location of the vehicles over a period of time for each enforcement vehicle. This data will only be stored to determine the number of vehicles scanned by location over time by the enforcement team, not to store vehicle information. Since the performance data includes no vehicle related information it may be stored indefinitely. This general data is valuable to demonstrate and analyze turnover and utilization of parking inventory to aid management in crafting effective parking policies to maximize use of the limited right-of-way stalls.

Data will not be retained that is not anonymous. Data related to the performance and efficiency of the parking enforcement team will be kept indefinitely to aid management in their analysis of enforcement practices.

STORAGE AND ACCESS

From a practical standpoint, the data the system collects has limited value other than for immediate verification of a valid permit or time regulations tracking. No personalized data will be stored, it is simply storing data that can identify the number of vehicles scanned and the area covered. The data is stored in a secure database maintained by the City’s contracted vendor—GTECHNA. The COMMAND CENTER back office system is a PostgreSQL database engine with security protocols in place to prevent unauthorized access.

Access to the data is limited to either direct database connections or automated reports. Access to COMMAND CENTER is password protected and is limited to Parking Enforcement personnel, Parking Enforcement management and the ALPR vendor (GTECHNA).

Access of data will be logged by database access logs. This will be tied to the user unless an automated report is generated. When an automated report is generated, it will be tied to a service account specifically for generating reports. The COMMAND CENTER system will log any manually reports generated and provide for an audit account showing user activity.

SHARING OF DATA

The Parking System does not currently share enforcement data with any other internal or external group.

D. EQUIPMENT/SYSTEM MAINTENANCE

System maintenance and calibration are covered through the established Service Level Agreement (SLA) with the City's vendor—GTECHNA. GTECHNA will provide support and assistance to the system components consistent with the SLA.